

## CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET  
SACRAMENTO, CA 95814-5512



April 13, 2006

Mr. Henryk Olstowski  
Assistant Manager, IID Energy  
Imperial Irrigation District  
485 E Villa Road  
El Centro, CA 92243

<b>DOCKET</b>	
<b>06-SPPE-1</b>	
<b>DATE</b>	APR 13
<b>RECD.</b>	APR 13 2006

Dear Mr. Olstowski:

**SUPPLEMENTAL DATA REQUESTS 29 to 36 FOR THE NILAND GAS TURBINE PLANT (06-SPPE-1)**

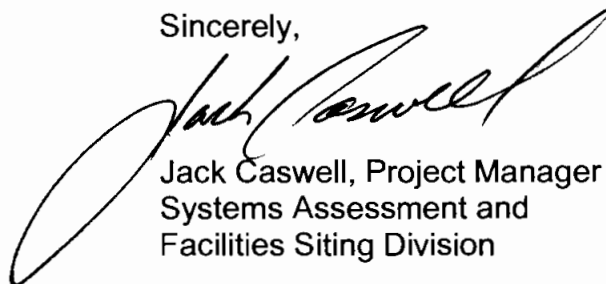
Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission staff is asking for the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

The requested information is in the technical area of Transmission System Engineering. Written responses to the enclosed data requests are due to the Energy Commission staff on or before May 14, 2006.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, you must send a written notice to both Commissioner James D. Boyd, Presiding Committee Member for the Niland Gas Turbine Plant project, and to me, within 10 days of receipt of this notice. The notification must contain the reasons for not providing the information, the need for additional time, and the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)).

If you have any questions, please call me at (916) 653-0062, or email me at [jcaswell@energy.state.ca.us](mailto:jcaswell@energy.state.ca.us).

Sincerely,



Jack Caswell, Project Manager  
Systems Assessment and  
Facilities Siting Division

Enclosure  
cc: POS

PROOF OF SERVICE / REVISED 3-29-06 FILED WITH  
ORIGINAL MAILED FROM SACRAMENTO ON 4-13-06 *RL*

## **NILAND GAS TURBINE PLANT (06-SPPE-1) SUPPLEMENTAL DATA REQUESTS**

### **TECHNICAL AREA: Transmission System Engineering**

**Authors:** Ajoy Guha, P.E and Mark Hesters

### **BACKGROUND**

Without a complete description of the proposed transmission interconnection staff will be unable to determine whether or not the proposed project would have a significant impact on the environment. While the proposed interconnection is adjacent to the proposed project site, the application did not include a description of the interconnecting facilities. A discussion of the length of new transmission facilities, the proposed interconnection facilities and whether the interconnection will require an expansion of the existing Niland substation would allow for the analysis of the potential impacts of the proposed project.

### **DATA REQUEST**

29. Provide a description of the route, the length and construction methods of the proposed 92 kV transmission interconnection line between the plant switchyard and existing Niland substation, and submit descriptions and necessary drawings.
30. Please discuss the interconnection to the Niland substation and whether or not the interconnection of the NGPT will require expansion of the substation. Should an expansion of the Niland substation be required to accommodate the NGTP, provide a description and the necessary drawings of the expansion.

### **BACKGROUND**

The California Environmental Quality Act (CEQA) requires the identification and description of the "Direct and indirect significant effects of the project on the environment." The application for a Small Power Plan Exemption requires discussion of the "energy resource impacts which may result from the construction or operation of the power plant." For the identification of impacts on the transmission system resources and the indirect or downstream transmission impacts, staff relies on the System Impact and Facilities Studies as well as review of these studies by the agency responsible for insuring the interconnecting grid meets reliability standards, in this case, the Imperial Irrigation District (IID). The studies analyze the effect of the proposed project on the ability of the transmission network to meet reliability standards. When the studies determine that the project will cause a violation of reliability standards, the potential mitigation or upgrades required to bring the system into compliance are identified. The mitigation measures often include the construction of downstream transmission facilities. CEQA requires the analysis of any downstream facilities for potential indirect impacts of the proposed project. Without a complete System Impact or Facility study, staff is not able to fulfill the CEQA requirement to identify the indirect effects of the proposed project.

## **NILAND GAS TURBINE PLANT (06-SPPE-1) SUPPLEMENTAL DATA REQUESTS**

According to the System Impact Study, "The interconnection of the proposed generating facility to the Niland 92 kV transmission system was found to have no adverse impact on the IID transmission system." The study also found that the proposed project would have minimal affects on the transmission networks of neighboring utilities. However, staff is concerned that the study is not complete and may have missed some potential adverse system impacts.

For example, the study did not analyze the effect of a potential outage of the two 92 kV lines leaving the Niland substation. It appears from the diagrams (Appendix A, Figure 1) that the loss of these lines would overload the 92/161 kV transformer at the Niland substation. Because this outage was not studied, no mitigation for this overload was identified and impacts of the proposed project may have been missed. Staff has included a list of other contingencies or outages that were not included in the System Impact Study. Staff is unclear on whether the System Impact Study included a complete transient stability study, short circuit study and post-transient voltage analysis.

### **DATA REQUEST**

31. Please explain how the study concludes that the interconnection of the NGTP has no adverse impact on the IID system when the study did not include the analysis of contingency or outages cases of the transmission elements connected to the Niland substation including one which could result in the overload of the 92/161 kV transformer at the Niland substation. A list of requested contingencies is on page 4 of this document.
32. The study did not include the transient stability plot diagrams for the full load rejection case. Also the transient stability studies for the 92 kV and 161 kV systems were performed using a 4-cycle clearing time which is typically used for 230 kV and higher systems. Please explain why the 4-cycle clearing time was used instead of the more typical 8-cycle or greater and whether or not changing the clearing time on the analysis would affect the conclusions of the study for the list of contingencies on page 4 of this document.
33. Please explain why the short circuit study did not include a single line-to-ground fault analysis report for the IID system and whether or not the addition of this analysis would change the conclusions of the study.
34. The study did not include a Post-transient Voltage analyses report. Please explain whether or how the inclusion of this report would affect the conclusions of the study

**NILAND GAS TURBINE PLANT (06-SPPE-1)  
SUPPLEMENTAL DATA REQUESTS**

35. The study states, "Neighboring utilities would not be impacted by the addition of the project." Please describe any efforts to coordinate the study or to discuss the study results with any of the neighboring utilities and whether or not these utilities have submitted any comments on the study.
36. If available, please provide pre- and post-project Power Flow Diagrams for any overloads (normal, n-1 or n-2) identified in the study. Also provide electronic copies of \*.sav and \*.drw,\*.dyd and \*.swt GE PSLF files and EPCL contingency files if they are available.

**Contingency List for Data Request 31**

- Niland-PRITP1 92kV line and Niland-Bombay 92kV line
- Niland-PRITP1 92kV line and Niland-CVsub 161kV line
- Niland-Bombay 92kV line and Niland-CVsub 161kV line
- Niland-PRITP1 92kV line and Niland-Blythe 161kV line
- Niland-Bombay 92kV line and Niland-Blythe 161kV line
- Niland-PRITP1 92kV line and Niland-ELCENTSW 161kV line
- Niland-Bombay 92kV line and Niland-ELCENTSW 161kV line
- Niland-PRITP1 92kV line and Niland 161/92kV transformer
- Niland-Bombay 92kV line and Niland 161/92kV transformer
- Niland-CVsub 161kV and Niland 161/92kV transformer
- Niland-Blythe 161kV and Niland 161/92kV transformer
- Niland-El Centro 161kV and Niland 161/92kV transformer
- Niland substation 161 bus fault
- Niland substation 92kV bus fault

**Contingency List for Data Request 32**

- Niland substation 92kV bus fault
- Niland substation 161kV bus fault
- Loss of Niland-CVsub 161kV line
- Loss of Niland –El Centro 161kV line
- Loss of Niland –Blythe 161kV line
- Loss of Niland-El Centro and Niland Blythe 161kV line
- Loss of Niland-PRITP1 and Niland-Bombay 92kV line

**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION  
OF THE STATE OF CALIFORNIA**

**SMALL POWER PLANT EXEMPTION  
FOR THE NILAND GAS TURBINE PLANT  
(Imperial Irrigation District)**

**DOCKET No. 06-SPPE-1**

**(Established 3/29/06)**

**PROOF OF SERVICE LIST**

**DOCKET UNIT**

*Send the original signed document plus the required 12 copies to the address below:*

CALIFORNIA ENERGY COMMISSION  
DOCKET UNIT, MS-4  
\*Attn: Docket No. 06-SPPE-1  
1516 Ninth Street  
Sacramento, CA 95814-5512  
docket@energy.state.ca.us

\* \* \* \*

*In addition to the documents sent to the Commission Docket Unit, also send individual copies of any documents to:*

**APPLICANT**

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**INTERESTED AGENCIES**

**COUNSEL FOR APPLICANT**

No agencies to date.

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**DECLARATION OF SERVICE**

I, Raquel Rodriguez declare that on April 13, 2006, I deposited copies of the attached RE: Data Request 29 to 36 in the United States mail at Sacramento, CA with first class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above. Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. I declare under penalty of perjury that the foregoing is true and correct.



\* \* \* \*

## **INTERNAL DISTRIBUTION LIST**

**FOR YOUR INFORMATION ONLY!** Parties **DO NOT** mail to the following individuals. The Energy Commission Docket Unit will internally distribute documents filed in this case to the following:

JAMES D. BOYD  
Commissioner & Presiding Member  
MS-3

JOSEPH DESMOND  
Chairman & Associate Member  
MS-3

GARRET SHEAN  
Hearing Officer  
MS-9

Jack Caswell  
Project Manager  
MS-15

Kerry Willis  
Staff Counsel  
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